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PULLIAM, CHRISTYANN R				
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2165				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

09/785,204

**Applicant(s)**

SAITO ET AL.

**Examiner**

CHRISTYANN RF PULLIAM

**Art Unit**

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Claims 1-21 are pending as amended July 9, 2010. Claims, 1, 7-9 and 15-16 are currently amended. Claims 2-5, 10-14 and 17-20 are previously presented. Claim 6 is original. Claim 21 is new.
2. New grounds of rejection and arguments are provided to address amendments. Therefore, this action is FINAL.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(1) as being anticipated by Rhodes, Bradley and Thad Starnier, *Remembrance Agent: A continuously running automated information retrieval system* (1996) (hereinafter Rhodes) in view of Barrera et al., U.S. Patent No. 6567800 (hereinafter Barrera).

As for Claim 1, Rhodes teaches:

an event occurrence detection device configured to detect an occurrence of an event (See e.g. Rhodes – page 122, col. 1 – Abstract and first full paragraph - current situation, reading email, change when start editing file; page 123 Design Issues – continuous and can explicitly request);

an extraction device configured to extract attribute information and a keyword from a first document corresponding to the event (See e.g. Rhodes – pages 122-123, Abstract and first full paragraph and Implementation section – query for related info created based on current document), the attribute information and the keyword being extracted from different portions of the first document (See e.g. Rhodes – keywords come from text of email, but attributes come from to and from fields of the email, these are different portions - pages 122, 2<sup>nd</sup> column -123 1<sup>st</sup> column);

a search device configured to search a database using the extracted attribute information and the extracted keyword to retrieve a second document having related matching attribute information having similarity to the attribute information extracted from the first document ... the second document containing the extracted keyword (See e.g. Rhodes – pages 122-123, first paragraph of The Remembrance Agent and the Implementation section – recommended related documents are listed, similarity based on keywords and filename, owner, date etc.); and

a display control device configured to display associated information corresponding to the second document (See e.g. Rhodes - Implementation section – front end displays suggestions).

Rhodes teaches similarity between documents based on attributes or keywords but does not expressly teach the second document needing to have both the keyword and attribute. This limitation basically requires a Boolean query with two elements (computer AND Smith), where Smith is the creator of the file and computer is the keyword. Similarly, a category and keyword would fulfill this requirement. However, Barrera teaches to retrieve a second document having related matching attribute information having similarity to the attribute information extracted from the first document and the second document containing the extracted keyword (See e.g. Barrera – Abstract, Figure 4 (search area and language are attributes and then can also add keywords, Figures 6-10 – category and keyword content search, col. 2, line 55- col. 3, line 10).

Rhodes and Barrera are from the analogous art of information retrieval. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Rhodes and Barrera to have combined Rhodes and Barrera. The motivation to combine Rhodes and Barrera is to increase the accuracy of the search results. Both Rhodes and Barrera index data and search it. Rhodes teaches extracting data from a current document and finding a related document using the data extracted from the current document. Rhodes does not detail how it balancing multiple keywords and attributes during the search. Barrera adds details about the use of a category plus keywords where the second document retrieved needs to meet both requirements. Barrera also allows the search to be limited to a search area like an intranet or the web, which would deal with searching the attributes, and then the user

can also add keywords to that search area. Allowing users to use categories as well as keywords decreases the amount of irrelevant information returned (See e.g. Barrera – col. 2, line 35-col. 3, line 10). Therefore, it would have been obvious to one skilled in the art to combine Rhodes and Barrera.

5. Claims 2-4, 17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of Barrera, in further view of Shaffer et al., U.S. Patent No. 6,094,681 (hereinafter Shaffer) (also cited in prior actions).

As for Claim 2, Rhodes as modified by Barrera teaches parent Claim 1. Rhodes teaches many different events including reading email and editing a file (See e.g. Rhodes – page 122 – first paragraph of The Remembrance Agent section). Rhodes does not expressly teach the event as detecting sending, receiving, or editing of an electronic mail. However, Shaffer teaches wherein said event occurrence detection device detects sending, receiving, or editing of an electronic mail as said event (See e.g. Shaffer column 3, lines 9-11, and column 5, lines 34-59, and Abstract - e-mail).

Rhodes and Shaffer are from the analogous art of event detection and analysis. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Rhodes and Shaffer to have combined Rhodes and Shaffer. The motivation to combine Rhodes and Shaffer is include the details about the recognition of more events. Shaffer adds details about the email interaction to the list of

events that can be detected and analyzed by both systems. Therefore, it would have been obvious to one skilled in the art to combine Rhodes and Shaffer.

As for Claim 19, Rhodes as modified by Barrera teaches parent Claim 1. Rhodes also considers words used in queries to the help system (See e.g. Rhodes – pages 123-124 – Design issues – user can expressly ask for help). Rhodes also teaches determining word frequency in the query document and the reference documents (See e.g. Rhodes – page 122 Implementation). However, Shaffer teaches the information processing apparatus further comprising,

a selection device for selecting an important word from among words contained in said first document (See e.g. Shaffer column 3, lines 48-64, column 4, lines 11-20),

an acquisition device configured to acquire said associated information by using said important word selected by said selection device as said keyword (See e.g. Shaffer column 5, lines 42-65, wherein “important word” reads on “keyword”).

Rhodes and Shaffer are from the analogous art of event detection and analysis. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Rhodes and Shaffer to have combined Rhodes and Shaffer. The motivation to combine Rhodes and Shaffer is include the details about the recognition of keywords. However, Shaffer fills in the details of the common keyword frequency evaluation that can be done as part of the event analysis. Therefore, it would have been obvious to one skilled in the art to combine Rhodes and Shaffer.

As for Claim 3, Rhodes as modified by Barrera and Shaffer teaches parent Claims 1 and 19. Shaffer also teaches wherein said acquisition device acquires a title and a URL of a Web page containing said important word as the associated information (See e.g. Shaffer column 6, lines 35-59, and column 6, lines 13-22).

As for Claim 4, Rhodes as modified by Barrera and Shaffer teaches parent Claims 1 and 19. Shaffer wherein said acquisition device acquires, in a predetermined timed relation, said associated information related to said important word selected by said selection device (See e.g. Shaffer column 7, lines 41-67, wherein "timed relation" reads on "scheduling reminders", and abstract). Horvitz also teaches timed relations (See e.g. Horvitz – sections 4 and 5).

As for Claim 17, Rhodes as modified by Barrera teaches parent Claim 1. Rhodes teaching pre-indexing (See e.g. page 122, col. 2), but does not expressly detail grouping. However, Shaffer more clearly teaches further comprising: a grouping device configured to group said existing information into a group of existing information based upon attribute information of said existing information (See e.g. Shaffer column 3, lines 48-64, also see Shaffer column 4, lines 11-20), wherein said acquisition device acquires the associated information related to said group of existing information made by said grouping device as said existing information (See e.g. Shaffer column 8, lines 26-30, also see Shaffer column 8, lines 56-67, and Shaffer column 9, lines 28), said search device searches for said group of existing information as said existing information



having similarity to information corresponding to the present event detected by the event occurrence detection device (See e.g. Shaffer column 3, lines 48-64), and the display control device controls displaying of said associated information related to said group of existing information as said existing information retrieved by said search device (See e.g. Shaffer column 2, lines 60-67, and Shaffer column 3, lines 1-11).

Rhodes and Shaffer are from the analogous art of event detection and analysis. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Rhodes and Shaffer to have combined Rhodes and Shaffer. The motivation to combine Rhodes and Shaffer is details the keyword analysis done to correlated events. Rhodes says that is uses words to make inferences about events. However, Shaffer fills in the details of the common keyword frequency evaluation that can be done as part of the event analysis. Therefore, it would have been obvious to one skilled in the art to combine Rhodes and Shaffer.

6. Claims 18, 20 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of Barrera and Shaffer, as applied above to claims 1 and 17, in further view of Hazlehurst et al., U.S. Patent No. 5,974,412 (hereinafter Hazlehurst).

As for Claim 18, Rhodes as modified by Barrera and Shaffer teaches parent claims 1 and 17. Rhodes teaches keywords (See e.g. Rhodes page 122 – SMART info

retrieval), but does not expressly teach weighting keywords. However, Hazlehurst teaches:

a weight calculation device configured to calculate the weight of key words contained in each said group of existing information (See e.g. Hazlehurst - col. 9, lines 7-41),

a selection device configured to select an important word among said key words based upon said weight of key words (See e.g. Hazlehurst - col. 7, lines 7-51, col. 8, lines 15-31 col. 9, lines 7-41, col. 19, lines 35-60, col. 21, lines 40-52, col. 24, line 50- col. 25, line 14),

wherein said acquisition device acquires said associated information related to said group of existing information using said important word selected by said selection device (See e.g. Hazlehurst - col. 9, lines 7-41 - author, source, and other meta-features).

The motivation to combine Rhodes, Barrera and Shaffer is above with claims 1 and 17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rhodes as modified by Shaffer by the teaching of Hazlehurst. Hazlehurst details ways in which keywords can be weighted which would add a higher level of precision to the systems of Rhodes and Shaffer. Therefore, it would have been obvious to one skilled in the art to combine Rhodes and Shaffer and Hazlehurst.

As for Claim 20, Rhodes as modified by Barrera and Shaffer teaches parent Claim 1. Rhodes teaches pre-indexing data (See e.g. Rhodes page 122, col. 2). However, Hazlehurst more expressly teaches a database construction device configured to construct the database by use of at least one of said attribute information extracted by said extraction device and said associated information (See e.g. Hazlehurst- col. 7, lines 7-60 – storage system and indices, col. 8, lines col. 8, lines 15-31, col. 9, lines 7-41 – index and master dictionary).

The motivation to combine Rhodes, Barrera and Shaffer is above with claims 1 and 17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rhodes as modified by Shaffer by the teaching of Hazlehurst. Hazlehurst details ways in which keywords can be weighted which would add a higher level of precision to the systems of Rhodes and Shaffer. Hazlehurst also gives examples of the ways that the data used by all the system can be stored. Therefore, it would have been obvious to one skilled in the art to combine Rhodes and Shaffer and Hazlehurst.

As for Claim 5, Rhodes as modified by Barrera and Shaffer and Hazlehurst teaches parent claims 1 and 20. Rhodes teaches pre-indexing data nightly (See e.g. Rhodes page 122, col. 2). Shaffer also teaches further comprising: update means for updating said database constructed by said database construction device when an update condition is satisfied (See e.g. Shaffer column 4, lines 11-67). Hazlehurst also teaches this (See e.g. Hazlehurst – col. 9, lines 22-42).

As for Claim 6, Rhodes as modified by Barrera and Shaffer and Hazlehurst teaches parent claims 1 and 20 and 5. Shaffer also teaches wherein said update condition can be set by a user (See e.g. Shaffer column 4, lines 11-67).

7. Claim 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of Barrera as applied above to claim 1, in further view of Kirsch et al., U.S. Patent No. 6,070,158 (hereinafter Kirsch) (also cited in prior actions).

As for Claim 21, Rhodes as modified by Barrera teaches parent claim 1. Rhodes also teaches wherein the extraction device is configured to extract a plurality of keywords from the first document (See e.g. Rhodes – col. 2 of page 122 and col.1 of pages 123). Rhodes does not make clear how it weights terms. However, Kirsch teaches the search device is configured to select a first keyword from the plurality of keywords based on corresponding keyword weights of the keywords during a predetermined time period immediately prior to a time of the selection (See e.g. Kirsch - col. 10, lines 16-45 - frequency, threshold, contextual significance and col. 17, line 25- col. 18, line 45 – score based on frequency, terms counts, groups, subgroups, weights; claims 1 and 10).

Rhodes and Kirsch are from the analogous art of search processing. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Rhodes and Kirsch to have combined Rhodes and Kirsch. The

motivation to combine Rhodes and Kirsch is to improve the accuracy of the search results. Kirsch expands the elements analyzed in a document and used to score the relevance of said document. Kirsch also weights terms in the document and query for significance. Due to the overlapping search subject matter, it would have been obvious to one skilled in the art to combine Rhodes and Kirsch.

8. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hazlehurst (also cited in prior actions) in view of Shaffer (also cited in prior actions).

As for Claims 7 and 8, Hazlehurst teaches:

An information processing method/instructions:

extracting attribute information from an existing text file (See e.g. Hazlehurst- col. 2, lines 1-15, col. 4, lines 48-60, col. 7, lines 7-51 col. 9, lines 7-41- author, source, and other meta-features);

extracting existing keywords from among words contained in said existing text file (See e.g. Hazlehurst- col. 7, lines 7-51, slurpees, col. 8, lines 15-31, col. 9, lines 7-41);

computing weights for said existing keywords based on use of occurrence frequency in the text file (See e.g. Hazlehurst- col. 9, lines 7-41 weighting based on word frequency in document), and acquiring associated information for each important keyword of the existing keywords having a weight higher than a predetermined threshold (See e.g. Hazlehurst- col. 7, line 7- col. 8, line 12-31, col. 9, lines 7-41, col. 19, lines 35-60, col. 21, lines 40-52, col. 24, line 50- col. 25, line 14, claim 44), the

associated information being obtained by accessing a search engine on the Internet using each important keyword as a search term (See e.g. Hazlehurst – liaisons – Figures 4, 8, 14a, Abstract, col. 7, line 53- col. 8, line 4, col. 20, line 39- col. 21, line 30);

constructing a database by associating each important word with at least one of said attribute information extracted in the extracting step and said associated information acquired in the acquiring step (See e.g. Hazlehurst- col. 7, lines 7-60 – storage system and indices, col. 8, lines col. 8, lines 15-31, col. 9, lines 7-41 – index and master dictionary);

Hazlehurst uses database to correlate documents, users and objects, as well as events and feedback. Hazlehurst teaches world events (See e.g. Hazlehurst – col. 14, lines 35-62) but does not expressly teach user interactions as events. However Shaffer more clearly teaches:

detecting an occurrence of said event (See e.g. Shaffer column 2, lines 24-37);

detecting an event keyword from said text file corresponding to said event detected in the event occurrence detecting step (See e.g. Shaffer column 3, lines 48-64);

searching said database constructed in the database constructing step to retrieve said associated information corresponding to said event keyword detected in the event keyword detecting step (See e.g. Shaffer column 2, lines 38-59); and

controlling displaying of said associated information retrieved in the searching step (See e.g. Shaffer column 2, lines 60-67, and Shaffer column 3, lines 1-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shaffer by the teaching of Hazlehurst. Hazlehurst details ways in which keywords can be weighted which would add a higher level of precision to the system of Shaffer. Hazlehurst also gives examples of the ways that the data used by all the system can be stored. Therefore, it would have been obvious to one skilled in the art to combine Shaffer and Hazlehurst.

9. Claims 9 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer (also cited in prior actions and above) in view of Lachman, Richard, *Animist Interface: Experiments in Mapping Character Animation to Computer Interface* (1997) (hereinafter Lachman), in further view of Kirsch et al., U.S. Patent No. 6,070,158 (hereinafter Kirsch) (also cited in prior actions).

As for Claim 9, Shaffer teaches:

a processing detection device configured to detect, as an event, predetermined processing of said predetermined application program (See e.g. Shaffer column 4, lines 10-5, column 6, lines 56-59);

a keyword detection device configured to detect keywords from said text file processed by said predetermined application program corresponding to said event detected by said processing detection device (See e.g. Shaffer column 3, lines 48-64, column 4, lines 11-20);

... by searching a database for a previously processed existing file corresponding to said important keyword (See e.g. Shaffer column 2, lines 38-59);

an input device configured to input a command (See e.g. Shaffer column 10, lines 31-33);

a command processing device configured to execute, in response to said command inputted by said input device, processing on said associated information (See e.g. Shaffer column 10, lines 31-40); and

a display control device configured to display, in response to said event detected by said processing detection device (See e.g. Shaffer column 2, lines 60-67, and Shaffer column 3, lines 1-11).

Shaffer teaches key word searches. Shaffer does not expressly teaches means for computing weights for said key words based on use of occurrence frequency in the text file, and searching for said associated information for each important keyword of the keywords having a weight higher than a predetermined threshold. However, Kirsch teaches means for computing weights for said keywords based on use of occurrence frequency in the text file, and searching for said associated information for each important keyword of the keywords having a weight higher than a predetermined threshold (See e.g. Kirsch - col. 10, lines 16-45 - frequency, threshold, contextual significance and col. 17, line 25- col. 18, line 45 – score based on frequency, terms counts, groups, subgroups, weights).

Shaffer and Kirsch are from the analogous art of search processing. It would have been obvious to one of ordinary skill in the art at the time the invention was made



having the teachings of Shaffer and Kirsch to have combined Shaffer and Kirsch. The motivation to combine Shaffer and Kirsch is expand the elements analyzed in a document and used to score the relevance of said document. Due to the overlapping search subject matter, it would have been obvious to one skilled in the art to combine Shaffer and Kirsch.

Shaffer does not expressly teach an animated agent. However, Lachman teaches:

an information processing apparatus for displaying an animated agent on a display device and for displaying associated information related to a text file processed by a predetermined application program (See e.g. Lachman – pages 11-12 – Agents with Faces has nine states for the agent to convey “Working” or “Confused” or “Unsure” and Microsoft Bob and Office Assistant – animates to show the machine following user instructions and proactively offers tips; further for ordinary tips a light bulb appears but for more important tips it gestures wildly; pages 36-39 Maitre-D Interface);

said animated agent onto said display device and changing a manner of displaying said character animated agent in response to said command inputted by said input device (See e.g. Lachman – pages 11-12 – Agents with Faces has nine states for the agent to convey “Working” or “Confused” or “Unsure” and Microsoft Bob and Office Assistant – animates to show the machine following user instructions and proactively offers tips; further for ordinary tips a light bulb appears but for more important tips it gestures wildly; pages 36-39 Maitre-D Interface).

Lachman and Shaffer and Kirsch are from the analogous art of event detection and analysis. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Lachman and Shaffer and Kirsch to have combined Lachman and Shaffer and Kirsch. The motivation to combine Lachman and Shaffer and Kirsch is detail the animated assistant that can be added to the systems of Shaffer and Kirsch. Lachman details the various prior systems of animated assistants. Therefore, it would have been obvious to one skilled in the art to combine Shaffer and Kirsch and Lachman.

As for Claim 12, Shaffer as modified by Lachman and Kirsch teach parent Claim 9. Lachman also teaches wherein said command processing device displays, on said display device, said associated information retrieved by said search device in an object form with respect to at least one of movement, storage, and deletion, in response to a display command inputted by said input device (See e.g. Lachman – page 12 – Office Assistant - user instructions like printing, saving, sending email; tips and shortcuts including for closing without saving).

As for Claim 13, Shaffer as modified by Lachman and Kirsch and Horvitz teach parent Claims 9 and 12. Lachman also teaches wherein said command processing device stores said associated information in response to a storage command inputted by said input device and displays a list of the stored associated information onto said display device (See e.g. Lachman – page 12 – Office Assistant – tips and shortcuts).

Kirsch also presents the search report including information about the results (See e.g. Kirsch - col. 9, lines 25-47).

As for Claim 14, Shaffer as modified by Lachman and Kirsch teach parent Claim 9. Shaffer also teaches wherein said associated information is a URL of a Web page and said command processing device starts a WWW browser so as to access said URL of said Web page as said associated information in response to an access command inputted by said input device (See e.g. Shaffer column 6, lines 13-59).

As for Claims 15 and 16, Shaffer teaches:  
detecting, as an event, predetermined processing of said predetermined application program (See e.g. Shaffer column 4, lines 10-5, also see Shaffer column 6, lines 56-59);

detecting keywords from said text file processed by said predetermined application program corresponding to said event detected in the processing detecting step (See e.g. Shaffer column 3, lines 48-64, also see Shaffer column 4, lines 11-20);

... searching a database for a previously processed existing file corresponding to each important key word (See e.g. Shaffer column 2, lines 38-59);

executing, in response to a command inputted, processing on said associated information retrieved in the searching step (See e.g. Shaffer column 10, lines 31-40);  
and

displaying, in response to said event detected in the processing of said detecting step (See e.g. Shaffer column 2, lines 60-67, and Shaffer column 3, lines 1-11).

Shaffer teaches keyword searches. Shaffer does not expressly teaches computing weights for said keywords based on use of occurrence frequency in the text file, and searching for said associated information for each important keyword of the keywords having a weight higher than a predetermined threshold by searching a database for a previously processed existing file corresponding to said important key word. However, Kirsch teaches computing weights for said keywords based on use of occurrence frequency in the text file, and searching for said associated information for an important keyword of the keywords having a weight higher than a predetermined threshold by searching a database for a previously processed existing file corresponding to each important key word (See e.g. Kirsch - col. 10, lines 16-45 - frequency, threshold, contextual significance and col. 17, line 25- col. 18, line 45 – score based on frequency, terms counts, groups, subgroups, weights).

Shaffer and Kirsch are from the analogous art of search processing. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Shaffer and Kirsch to have combined Shaffer and Kirsch. The motivation to combine Shaffer and Kirsch is expand the elements analyzed in a document and used to score the relevance of said document. Due to the overlapping search subject matter, it would have been obvious to one skilled in the art to combine Shaffer and Kirsch.

Shaffer does not expressly teach an animated agent. However, Lachman teaches:

a computer to display an animated agent on a display device and to display associated information related to a text file processed by a predetermined application program (See e.g. Lachman – pages 11-12 – Agents with Faces has nine states for the agent to convey “Working” or “Confused” or “Unsure” and Microsoft Bob and Office Assistant – animates to show the machine following user instructions and proactively offers tips; further for ordinary tips a light bulb appears but for more important tips it gestures wildly; pages 36-39 Maitre-D Interface);

said animated agent onto said display device and changing a manner of displaying said animated agent in response to said command inputted (See e.g. Lachman – pages 11-12 – Agents with Faces has nine states for the agent to convey “Working” or “Confused” or “Unsure” and Microsoft Bob and Office Assistant – animates to show the machine following user instructions and proactively offers tips; further for ordinary tips a light bulb appears but for more important tips it gestures wildly; pages 36-39 Maitre-D Interface).

Lachman and Shaffer and Kirsch are from the analogous art of event detection and analysis. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Lachman and Shaffer and Kirsch to have combined Lachman and Shaffer and Kirsch. The motivation to combine Lachman and Shaffer and Kirsch is detail the animated assistant that can be added to the systems of Shaffer and Kirsch. Lachman details the various prior systems of animated

assistants. Therefore, it would have been obvious to one skilled in the art to combine Shaffer and Kirsch and Lachman.

Alternatively for claims 9-16, references to Kirsch can be replaced with Hazlehurst as above with claims 7-8, 20 and 5-6.

10. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer (also cited in prior actions and above) in view of Lachman, in further view of Kirsch (also cited in prior actions) and in further view of Eric Horvitz et al., *The Lumiere Project: Bayesian User Modeling for Inferring the Goals and Needs of Software Users*, Proceedings of the 14th Conference on Uncertainty in Artificial Intelligence, July 1998, pages 256-265 (hereinafter Horvitz) (also cited in prior actions).

As for Claim 10, Shaffer as modified by Lachman and Kirsch teach parent Claim 9. Lachman describes the animated agents providing tips but does not detail the additional displays of text as a script. However, Horvitz teaches wherein said display control device also displays text information as a script of said character animated agent (See e.g. Horvitz – Figures 7- 11).

The motivation to combine Lachman and Shaffer and Kirsch is above with Claim 9. Horvitz and Shaffer are from the analogous art of event detection and analysis. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Horvitz and Shaffer to have combined Horvitz and

Shaffer. The motivation to combine Horvitz and Shaffer is details the keyword analysis done to correlated events. Horvitz provides further details about the help interface that is also described in Lachman. Horvitz and Shaffer both detail inferences that can be made from event detection. Therefore, it would have been obvious to one skilled in the art to combine Horvitz and Shaffer.

As for Claim 11, Shaffer as modified by Lachman and Kirsch and Horvitz teach parent Claims 9-10. Horvitz also teaches further comprising an output device configured to output a voice signal corresponding to said text information displayed by said display control device (Horvitz – sections 3 and 7, Figures 8-11).

### ***Response to Arguments***

11. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. The arguments regarding claim 1 are based on amendments. The new grounds of rejection address those amendments.

12. Applicant's arguments with respect to claims 7 and 8 have been fully considered but they are not persuasive. Applicant argues that Hazlehurst does not teach "acquiring associated information for each important keyword of the existing keywords having a weight higher than a predetermined threshold...". Examiner disagrees because Hazlehurst teaches determining important words and then finding documents that are

similar. Hazlehurst weights words in documents (See e.g. Hazlehurst- col. 9, lines 7-41). When performing a search to find documents that are similar (find-similar and liaisons), a vector space is created for the document including the words determined to be important (See e.g. Hazlehurst – collator vector space and centroid space – col. 11, lines 5-65). Semantic distances are then determined based on the words important to the collator (keyword or topic) and the document. Thresholds are also applied to these distances (See e.g. Hazlehurst – col. 21). A table is created to compare a document and a collator to determine the goodness of the fit (See e.g. Hazlehurst, col. 13). This goodness score is used by the notes and liaisons for queries. The goodness of the document and the collator topic (keyword) are judged by a threshold (See e.g. Hazlehurst – col. 17 and col. 19, lines 45-54). Those determined to be fit are based on a threshold goodness score are used by the notes and liaisons for queries (See e.g. col. 13 and col. 21, col. 23, lines 25-37). Admittedly, Hazlehurst has created its own vocabulary but seems to teach the elements of the claims. Therefore, claims 7 and 8 are taught by the combination of Shaffer and Hazlehurst.

13. Applicant's arguments with respect to claims 9 and 15-16 have been fully considered but they are not persuasive. Applicant argues that the references do not teach "searching for said associated information for each important keyword of the keywords having a weight higher than a predetermined threshold..." Examiner disagrees because the references teach searching using weighted keywords. Shaffer used for searching a database for a previously processed existing file corresponding to



said important keyword (See e.g. Shaffer column 2, lines 38-59). Kirsch used for the argued elements - searching for said associated information for each important keyword of the keywords having a weight higher than a predetermined threshold (See e.g. Kirsch - col. 10, lines 16-45 - frequency, threshold, contextual significance and col. 17, line 25- col. 18, line 45 – score based on frequency, terms counts, groups, subgroups, weights; claims 1 and 10). In col. 10 of Kirsch, the system determines important words, which are those of contextual significance, based on sentence analysis of the document. Some documents are put of the list of stop words because they are too frequent. The words that are determined to be contextually significant are then passed to the term filter and counted. Col. 17 of Kirsch continues with the statistics for each document and scoring based on normalized term frequency. The query is a weighted list of terms as described in col. 17, which accounts for relative number of occurrences of a word in all documents. A term that appears in too many documents will be removed from the document index by earlier filtering or removed from consideration based on the weights. The contextually significant words are those above a threshold of weight and importance in the document. Therefore, Kirsch teaches searching for said associated information for each important keyword of the keywords having a weight higher than a predetermined threshold.

***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTYANN RF PULLIAM whose telephone number is (571)270-1007. The examiner can normally be reached on M-F 9 am-6 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Neveen Abel-Jalil can be reached on 571-272-4074. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. R. P./  
Examiner, Art Unit 2165  
September 8, 2010

/Neveen Abel-Jalil/

Supervisory Patent Examiner, Art Unit 2165